Wisconsin's geologic past

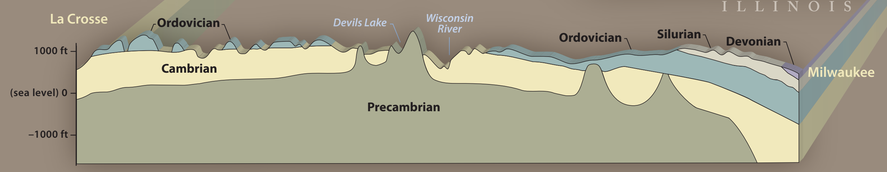
Changing landscapes

From studying our rocks, we know that at different times in the past 2.8 billion years…

- Mountains and volcanoes once stood tall in central Wisconsin
- A shallow sea covered nearly the entire state
- Glaciers plowed across Wisconsin, leaving behind broad, rolling hills

How old are the rocks?

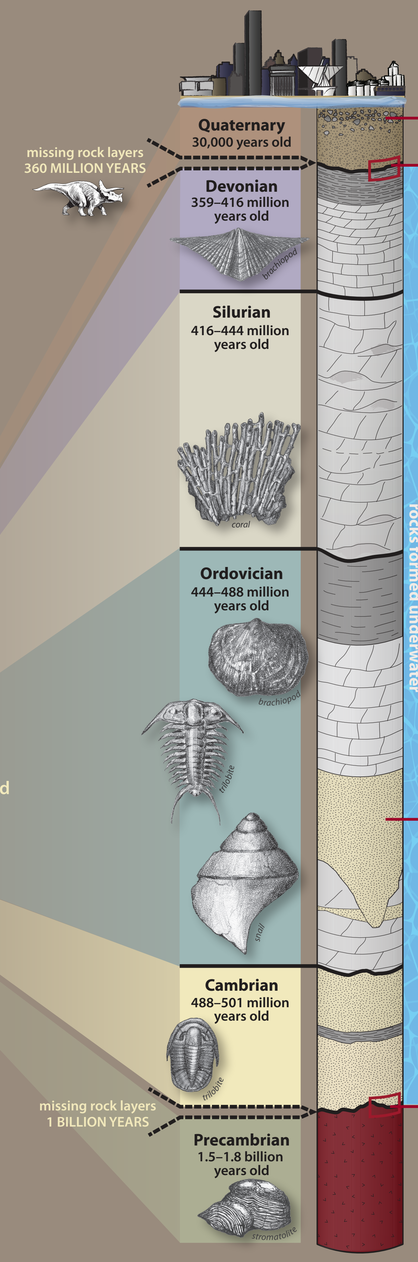
This map shows the age of the uppermost rock layer you would find if you dug down to solid rock.



Slice of earth If you made a slice through the ground from La Crosse to Milwaukee, this is what the rock layers would look like.

What's under Milwaukee?

Shown here are the kinds of rocks and fossils you would find if you drilled a very deep hole below the city.



A cold past

Many times during the past 2 million years, glaciers covered much of the state. Woolly mammoths migrated north as the glaciers melted.

Dinosaurs in Wisconsin?

About 360 million years of the rock record are missing here. Dinosaurs likely roamed this area, but any rock that contained their bones has eroded away.

Wisconsin underwater

For much of 140 million years, Wisconsin was covered by shallow seas. The rocks from these time periods are all rocks you could find forming on the sea floor today.

Shifting sands

Just like sand is found at the beach and in riverbeds today, these sandy layers were laid down in those kinds of places in the past.

Missing rock layers

About 1 billion years of the rock record is missing between these layers. Erosion wore down and destroyed the rocks.

Wisconsin's oldest rocks

Our oldest rocks are about 2.8 billion years old and are exposed in the central and northern parts of the state.

glacial sediment · dolostone & limestone · shale · sand-stone · igneous & metamorphic rocks

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More information: To learn more about Wisconsin's geologic past, visit www.WisconsinGeologicalSurvey.org.

Sources: Map and rock column modified from *Roadside Geology of Wisconsin*, Robert H. Dott and John W. Attig, 2004, courtesy of Mountain Press Publishing; cross section modified from *Bedrock Geology Map of Wisconsin*, M.G. Mudrey, Jr., B.A. Brown, and J.K. Greenberg, 1982, WGNHS map; fossil drawings from *Common Paleozoic Fossils of Wisconsin,* Ross H. Nehm and Bryan E. Bemis, 2002, WGNHS ES45; mammoths illustration by Susan Hunt.

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